

CLAIMS

1. A Raman spectrometry apparatus containing a source of excitation (14), optical means of excitation directing a beam of excitation (15) derived from that source on the sample (17), means (18) for collecting the energy diffused by the sample (17) containing an inlet diffusion slot (19), a spectral dispersion system (20), means for selecting the Raman energy (23), a detector (22), optical detection means 5 directing the Raman energy thus collected and selected to the detector (22), characterised in that the optical means (16) of excitation cause the beam of excitation (15) to be dispersed by the dispersion system (20), said optical means (16) of excitation containing an inlet slot (24) and an outlet slot of 10 excitation constituted by the inlet diffusion slot (19) and selecting the wavelength of excitation.
2. A Raman spectrometry apparatus according to claim 1 wherein the inlet slot (19) of excitation lies in the focal plane of the dispersion system (20).
3. A Raman spectrometry apparatus according to the claims 1 or 2, characterised in that the means of selection (23) of the Raman energy include a holographic filter which stops the wavelength of excitation.
4. A Raman spectrometry apparatus according to any of 20 the claims 1 to 3; characterised in that the means of selection (23) of the Raman energy include an operatable micromirror reflective system (27).
5. A Raman spectrometry apparatus according to any of 25 the claims 1 to 4, characterised in that means for sampling a portion of the beam of excitation are placed between an outlet slot of excitation and the sample (17) and enable to control the wavelength of excitation at its maximum of energy by 30 microrotation of the dispersion system (20).